DOCUMENT RESUME

ED 459 857 IR 058 409

AUTHOR	Kromke, Diane
TITLE	An Evaluation of Current CCTV Usage To Support Patient Health Education Activities at the Louis Stokes Cleveland Department of Veterans Affairs Medical Center, Brecksville Division.
PUB DATE	2001-08-00
NOTE	41p.; Master of Library and Information Science Research Paper, Kent State University.
PUB TYPE	Dissertations/Theses (040) -- Tests/Questionnaires (160)
EDRS PRICE	MF01/PC02 Plus Postage.
DESCRIPTORS	*Closed Circuit Television; *Health Education; Nurses; Patient Education; Programming (Broadcast); Questionnaires; Surveys; Television Research; Use Studies; Users (Information)
IDENTIFIERS	*Technology Utilization

ABSTRACT

Closed-circuit television (CCTV) is a promising technology used by many medical centers to support health education activities for patients and their families. It may provide one method of reaching multiple patients at various times and locations, providing consistent, easily repeated information in a low stress manner, but it is unclear how much of the daily patient health education programming is actually useful to clinical staff on the wards and clinics. A two-part survey of all nurse managers (N=12) was used to gather information for this study. The purpose was to find how CCTV patient health education programs are utilized by nursing staff on the wards. The phase one interview was designed to answer questions concerning most often viewed health topics, viewing patterns, and documentation. Phase two of the survey answers questions concerning best times of day to supplement planned health education activities, health topics to be addressed, video on demand usefulness, and the addition of non-health programming. Phase one shows that CCTV is underutilized. Phase two points out inadequacies of the system and can be used as a guide to system improvement. CCTV is not, in its present state, the useful tool that a busy healthcare professional needs to help provide health education to patients. The questionnaires, consent forms, and CCTV schedule are appended. (Contains 21 references, 4 figures, and 3 tables.) (Author/MES)

Reproductions supplied by EDRS are the best that can be made
from the original document.

ED 459 857

KENT STATE UNIVERSITY

AN EVALUATION OF CURRENT CCTV USAGE TO SUPPORT PATIENT HEALTH EDUCATION ACTIVITIES AT THE LOUIS STOKES CLEVELAND DEPARTMENT OF VETERANS AFFAIRS MEDICAL CENTER BRECKSVILLE DIVISION

A RESEARCH PAPER SUBMITTED IN REQUIREMENT FOR THE DEGREE OF MASTER IN LIBRARY SCIENCE

BY
DIANE KROMKE

KENT, OHIO
AUGUST 2001

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY

D.P. Wallace

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

1

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☒ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

IR058409

BEST COPY AVAILABLE

2

Master's Research Paper by

Diane Kromke

B.A., University of Wisconsin at LaCrosse, 1984

M.L.S., Kent State University, 2001

Approved by

Advisor_____ Date_____

CONTENTS

Chapter 1
INTRODUCTION 1

Chapter 2
REVIEW OF THE LITERATURE 7

Chapter 3
RESEARCH OBJECTIVES AND METHODOLOGY 11

Chapter 4
ANALYSIS OF DATA 14

Chapter 5
CONCLUSIONS AND RECOMMENDATIONS 23

Appendix A
QUESTIONNAIRES 28

Appendix B
CONSENT FORMS 31

Appendix C
CCTV SCHEDULE 33

REFERENCE LIST 34

LIST OF ILLUSTRATIONS

Fig. 1. Time of day patients viewed health education programs on CCTV 15

Fig. 2. Health education topics recommended to patients by nurse managers 16

Fig. 3. Times given for current PHE activities 18

Fig. 4. CCTV Awareness vs. Use 24

LIST OF TABLES

Table	Page
1. Health education topics in current rotation listed on survey form by greatest number of requests to lowest	19
2. Topics inserted by nurse managers in addition to those given on the survey	20

CHAPTER 1

INTRODUCTION

Closed-circuit television (CCTV) is a promising technology, used by many medical centers to support health education activities for patients and their families. It may provide one method of reaching multiple patients at various times and locations, providing consistent, easily repeated information in a low stress manner. But it is unclear how much of the daily patient health education programming is actually useful to clinical staff on the wards and clinics.

There are two basic types of CCTV systems used for patient health education: on demand; and pre-programmed. Each of the two types has features to recommend them, and drawbacks.

The pre-programmed system will play a specified program at the specified times. It allows very little room for flexibility, and requires an operator familiar with the programming to alter the schedule once the programming has been completed. It is limited by the number of videocassette players hooked up to the system, and requires the actual videocassette to be played. This means that if there are seven videocassette players, only seven video programs are accessible, unless an operator manually changes the cassette in the player. It will, however, play the videos as programmed, so that channel surfers will see programs playing, and may stop on that channel to view programs.

The on demand system allows for much greater flexibility. Viewers, whether patients or their caregivers, can use the phone to request programs from a menu, and the program will begin within a few moments of the request. Videocassettes are not played in video players, but have been saved onto a computer's disk drive. This means that the number of programs available is far greater than the

number of video players. This also saves a great deal of wear and tear on the videocassette and negates the need for costly players and their maintenance. It also saves operator time since programming is not required and no videocassettes need to be switched.

Currently there is no approved or consistent method of documenting any patient health education done via CCTV at this medical center. CCTV lacks the classroom's advantage of a centrally located audience that can be centrally monitored and documented. Immediate feedback from the patient is an important part of assessing the quality and quantity of what the patient has learned, to identify barriers to learning the patient may have, and to answer questions the patient may have that arise from the education. Preprogrammed CCTV systems are not able to tell which programs were viewed, or by whom. On demand systems oftentimes have the ability to generate reports based on which phone was used to request each program. Some systems will even allow for a post-test which will help to evaluate the patient's understanding of the materials presented.

Patient education "should enable patients, and their families and friends, when appropriate, to make informed decisions about their health; to manage their illnesses; and to implement follow-up care at home." (Gilroth 1993) According to A Patient's Bill of Rights:

> The patient has the right to and is encouraged to obtain from physicians and other direct caregivers relevant, current, and understandable information concerning diagnosis, treatment, and prognosis. (American Hospital Association 1992),

This represents quite a change from the days when the doctor told you only what he thought you really needed to know, and you trusted him to make any healthcare decisions for you.

With today's emphasis on rising healthcare costs and increased life-span, preventive medicine and self-care are now more necessary than ever. The responsibility for raising the public's awareness of health risks and promoting healthy lifestyle choices now rests on the medical community. Healthcare practitioners must rely on patients to carry out the daily practices that lead to greater health and

wellness. To do this, patients and their families need the basic information to implement these changes, and the motivation to continue them, until either the treatment end, or they become lifelong habits.

The Louis Stokes Cleveland Department of Veterans Affairs Medical Center (VAMC), Brecksville division, has fourteen interconnected buildings housing 600-700 inpatient beds in twelve wards. With the exception of the nursing home units, the primary diagnosis of most patients is psychiatric in nature.

Several wards are devoted to substance abuse treatment programs, and three wards house the Domiciliary program. Since all of these programs are considered longer-term programs, it is not unusual for patients to spend from several months to two years at the hospital. This extended stay atmosphere presents greater challenges and greater opportunities in regards to patient education. Most hospitals do not involve themselves in patient job search skills and job retraining, or helping patients to achieve their G.E.D., or help them to enroll in college or technical school courses. Most hospitals have only a few days in which to educate their patients, and a very limited scope of educational responsibilities.

In an effort to meet the diverse health education needs of the veteran population, the Brecksville VAMC has one CCTV channel which provides patient health education programming, called Healthcare CCTV. The healthcare channel provides programming each day from 8:00am to approximately 10:00pm daily. A sample weekly schedule is included in Appendix C. The CCTV equipment is the pre-programmed type.

Most televisions in patient rooms, day rooms, and some conference rooms have the ability to receive CCTV broadcasts, although not all patients have televisions in their rooms. Some wards have only one shared TV in the dayroom. Since viewing areas are so scattered and numerous, getting routine feedback on patient viewing of programs has been a problem. In addition, the medical center's

Healthcare CCTV is only one channel of the twelve available to patients. Of the remaining eleven channels, six show local community commercial stations, carrying programs such as soap operas, news, comedy shows, movies and talk shows, and one channel plays current release major motion pictures selected by the Recreation department of the hospital. These channels are in direct competition for patient attention. One channel is set aside for chaplain use to broadcast religious services, but has not been broadcasting for the past several years. The final two channels are used for employee education satellite broadcasts.

Definitions of Terms

CCTV (Closed Circuit Television) - System which allows videocassette players and/or live broadcasts to be received by any number of televisions or monitors from a central location.

Character Generator Computer that displays text and/or graphics on the screen during the times that a video or live broadcast is not being aired.

Domiciliary Ward containing patients classified as outpatients, but who live at the medical center in a special program while they receive any medical care required, and go through a social skills program, remedial education, re-employment skills training, and structured job searching.

Medical Primarily dealing with the prevention and treatment of disease and injury. Topics include physical trauma, surgery and invasive procedures, and contagious and non-contagious physical illness such as tuberculosis, diabetes, coronary artery disease, and hepatitis.

Patient A veteran of the United States Armed Forces seeking medical care at a Department of Veterans Affairs medical facility, and family members and friends who accompany them or care for them. Includes both inpatients and outpatients.

PHE (Patient Health Education) – Education geared toward better understanding the nature and treatment of a mental or physical medical diagnosis. Also to teach general health and wellness through lifestyle improvement.

Psychiatric Primarily dealing with the diagnosis, treatment and prevention of mental illness. Topics include substance abuse, stress disorders, depression, schizophrenia and organic brain disorders.

Limits of the Study

This study will be limited to the Department of Veterans Affairs Medical Center in Brecksville, Ohio. Nurse managers or their designees will be asked to participate. Even though CCTV supports departments and activities other than health education, patient health education activities will be the primary focus of survey questions. Since there are only 12 wards at this medical center, all nurse managers were asked to participate.

The results of this survey are not intended to predict the outcome of any similar surveys at other Department of Veterans Affairs medical centers, or any other medical facilities. These findings are specific to the current programs, patient population, and management at this medical center at the time this survey was completed.

CHAPTER 2

REVIEW OF THE LITERATURE

Studies have been done regarding the use of CCTV programming as an educational tool for children and adolescents (Guttentag, Albritton, and Kettner 1983; Harris 1986; Guttentag 1986). These studies point out that since children in a medical center setting tend to watch a large number of hours of network television, they are much more apt to respond to CCTV health education programming when it is targeted to their age groups. Another discusses programming targeted to either new parents or parents in pediatric waiting rooms (Worobey 1985). Because the patients at the Brecksville VAMC have all been in the military, and the overall veteran population is more than 95% male, this VAMC has no pediatric or obstetric wards or clinics. No CCTV programming is targeted to minors, pregnant women, or new parents.

In 1984, 29% of VA medical centers had CCTV in patient's rooms, and 40% had CCTV in the lobby and visiting areas (U.S. Department of Veterans Affairs 1987). A survey of VA patients nationwide found that patient and family involvement was an important factor in the patient's care, so much so that this involvement is a major factor influencing the effectiveness of PHE programs (U.S. Department of Veterans Affairs 1991). A more recent study was done of just the five Department of Veterans Affairs medical centers in Ohio, which shows that CCTV is available in all five hospitals, but only 80% (N=4) use CCTV for patient health education (U.S. Department of Veterans Affairs, VA Healthcare System of Ohio 1998).

Studies on the use of CCTV for patient health education were found dating back as early as

1974. Due to its age, this study (Lernihan 1974) was not found to be useful for the current survey, since major changes have occurred, including the availability and lower cost of video equipment and the plethora of commercially produced videos of high quality. Hospitals no longer need to create their own programs in-house to cover basic health topics.

Most studies also try to gauge patient use and satisfaction with CCTV health education (Cipparrone and others 1997; Esdale and Harris 1984; Mancini 1984; Regen 1983). These differ from the focus of the current survey which is to find how CCTV patient health education programs are utilized by nursing staff on the wards. One study (Nussen 1990) surveyed both patient use and staff use at the same time, drawing a correlation between the responses of the two groups.

One recurring factor in the literature was the emphasis on use of CCTV or any other teaching aid, as exactly that - an aid. It is not meant to replace direct interaction with a patient, but to supplement human interaction (American Hospital Association 1982; Esdale and Harris 1984). Jacqueline Lowe Worobey said in her speech at the Annual Meeting of the Eastern Communication Association:

> "As stated by a staff member at a Cleveland area hospital, one-to-one patient-professional relationships remain a crucial link in effectively employing CCTV. Used as a tool for teaching patients, CCTV is seen as a supplement to traditional methods of instruction, rather than as a substitution for the interpersonal interaction between the professional and patient." (Worobey 1985)

Any education CCTV provides should always be in addition to the direct care and teaching of the patient's care provider, or a qualified person trained in health education. CCTV should be used to provide consistent basic health education that assists healthcare providers. It is then up to the healthcare provider to supply any additional information required, and to expand on the basic information with individualized teaching (Mancini 1984).

One study addressed the question of whether patients were more or less likely to view a CCTV

program if it was recommended to them by a member of their healthcare team. Their study shows that patients are not only far more likely to view health education programs when programs are recommended by a member of their healthcare team, but that the perceived helpfulness of the programs increased (Cipparrone and others 1997). The American Hospital Association (AHA) has published a resource manual for utilizing CCTV for patient health education. The AHA stresses that not only should you promote the system to patients, an important part of making a CCTV system useful, is promoting the system to the staff who will in turn promote it to their patients (American Hospital Association 1982).

Another important point is that programs should be tailored to the needs of your target audience (Woroby 1985; Dooley 1992). These studies prove that mixing surgical, obstetric, gerontologic, cardiac and pediatric programs together will lose viewers. These types of programming should be separated, onto different channels if possible, or into grouped time slots if this is not possible. In that way, a patient with heart problems will be more likely to remain watching a CCTV channel, if a program of interest to him is followed another program on heart health. Similarly, a program for women should be followed by another program for women, until that timeslot has been filled. Then the next time slot can be targeted to another non-related health topic.

Another perceived benefit of CCTV is that family, friends and home caregivers who arrive at times other than when the patient receives teaching can view the same programs the patient viewed. CCTV allows for repetition of the same program at many different times, presenting exactly the same information in exactly the same way. This cuts down the amount of time healthcare staff needs to spend giving the same teaching and instruction for the same patient (Agre and others 1990). It also beneficial for the patient who would like to repeat the program to reinforce the one-on-one individualized training received.

One study (Agre and others 1990) calculated the average teaching time per patient at one medical center, which was found to be 16.6 minutes per patient per day. With the staffing and patient census at that time, they extrapolated this amounted to 128 hours per day. This amounted to a total cost of $859,567 per year. Since wages have risen since this study was completed in 1989, and patient health education is more of a requirement for the Joint Commission for Accreditation of Healthcare Organizations (JCAHO) than in the past, this is a dramatic expenditure of time and resources. In some instances, third party reimbursement is available to cover some of the costs, but documentation is necessary.

Another facet of managing a CCTV system for patient health education is periodic evaluation of the system's use and usefulness.

> Evaluation is a critical yet frequently neglected component of a CCTV patient education project. It is critical because, without at least a minimal evaluation effort, no one can demonstrate whether a given CCTV system in a given hospital is actually worth the time, money, and effort that has been invested in it--or whether the system is worth any more investment. (American Hospital Association 1982)

Evaluation is one tool to help target appropriate programs at appropriate times, and to locate and address any barriers to its use.

Studies of patient use of CCTV have reported findings to be as high as 85% (Mancini 1984) and as low as 1.7% (Esdale and Harris 1984). This is a drastic difference especially since both studies were done in the same year.

CHAPTER 3

RESEARCH OBJECTIVES AND METHODOLOGY

An assessment of current usage needs to be done to establish a baseline for future comparisons, and guide choices in CCTV programming. In order to realistically achieve this, some questions must first be answered.

1. Which health education subjects are viewed most often?
2. Are they viewed independently or in conjunction with a planned activity?
3. How is use of CCTV programming for patient activities documented?
4. What times of day would be best to supplement planned health education activities?
5. What health topics need to be addressed that haven't already been covered?
6. Would video on demand be more useful than a static schedule?
7. Would the addition of non-health programming make patients more likely to tune in to the hospital's channels rather than commercial channels?

These responses will provide further information about health education activities and provide additional opportunities to promote its availability and function. It will also be used to help design, and hopefully implement, a more useful program of CCTV use for patient health education.

A two-part survey (Appendix A) was used to gather information for this study. All nurse managers were contacted and asked to participate (N=12). Permission to do the survey was obtained from the Chief of Library Service, the Chief of Nursing Service, the Associate Chief of Education and the Chief of Staff at the medical center (Appendix B). Permission was also granted by Kent State University's Human Subjects Review Board in accordance with University Policy (3342-3-02) and Federal Regulations (45 CFR 46, as amended). Due to the small sample size, each nurse manager was asked to participate in order to build a more complete overview of the medical center's current CCTV usage. Any ward unable to receive the broadcasts would have been excluded at this time.

The phase one interview was designed to answer the first three questions of the purpose of the study, namely, which health education subjects are viewed most often, are they viewed independently

or in conjunction with a planned activity, and how are they documented.

This phase was conducted on the spot, without allowing the nurse managers to see the questions before the interview. Each nurse manager was contacted and an appointment was set up for a fifteen minute interview. Interviews were done in person, with the interviewer presenting the consent form to be signed. Nurse managers were given the opportunity to view the survey as well as the approval memorandum from the medical center administration before signing the consent form. The interviewer completed the survey form to maintain consistency.

Phase one consisted of a survey with a minimum of one and a maximum of nine multi-part questions: five free-answer open-ended; nine closed-ended; and 1 close-ended multiple choice question. A negative response to question number one "Are you aware of the hospital's Closed Circuit Television (CCTV) system?" made any further questions for the survey unnecessary. Had any nurse manager replied negatively, they would have been informed in more detail about the service and its possible uses. Remaining questions receiving a positive response were asked further questions to elicit more detailed information. Due to vacations, nurse managers detailed to other projects, and rescheduled appointments, this phase took approximately 8 weeks to complete. Phase one was completed and analyzed before finalizing and implementing phase two.

Phase two of the survey asks questions to help answer the final four questions posed, namely, what times of day would be best to supplement planned health education activities, what health topics need to be addressed that haven't already been covered, would video on demand be more useful than a static schedule, and would the addition of non-health programming make patients more likely to tune in to the hospital's channels rather than commercial channels. This consisted of thirteen multi-part questions: one close-ended Likert scale; ten closed-ended; one close-ended multiple choice; 1 open-ended multiple choice; and three open-ended questions.

This phase was hand delivered to each nurse manager. Nurse managers were allowed several days to complete the survey to consider to their wants and needs, discuss them with ward staff, and be better able to volunteer information and ideas. In some instances, nurse managers conferred with each other to discuss ideas for survey answers. This sharing of ideas was encouraged.

After several days, each nurse manager was contacted, and arrangements were made to pick up the surveys. From delivery of the first survey until the last was returned took two weeks. Responses were then tallied, and nurse managers were contacted for additional input if any questions had been left blank. Because the sample size was relatively small (N=12), each response from each ward was considered highly important. Had questions been left blank, results would have been skewed.

Frequency distributions and percentages, rounded to the closed whole percent, were calculated from the responses given. Graphs and tables illustrate selected findings.

CHAPTER 4

ANALYSIS OF DATA

Phase One

The Phase one interview was designed to answer the first three questions of the purpose of the study, namely, which health education subjects are viewed most often; are they viewed independently or in conjunction with a planned activity; and how are they documented.

Are you aware of the hospital's Closed Circuit Television (CCTV) system? The answer to this initial question was a unanimous yes (N=12). Every nurse manager knew of its existence. Since the response to the first question was affirmative, the remaining survey questions were asked of each nurse manager.

Do you receive the weekly schedule mailed to each ward? Is it posted anywhere? Is it visible to patients? All nurse managers (N=12) stated that they receive the weekly schedule, and it is posted on their ward. However, 17% (N=2) do not post the schedule where it is visible to patients.

How many CCTV channels does the hospital have? Eight of the nurse managers (67%) responded with two, the expected number. Two nurse managers (17%) answered one, possibly thinking only of the Healthcare CCTV channel. No nurse managers answered three. One nurse manager (8%) thought there were four CCTV channels, another nurse manager (8%) was not sure.

Do you know which departments run the system/do the programming? Of the twelve nurse managers surveyed, 58% (N=7) did not know which departments were responsible for the programming content. When asked what those departments were, 42% (N=5) were able to answer with the correct answer of Library and Voluntary/Recreation Services. No nurse managers mentioned

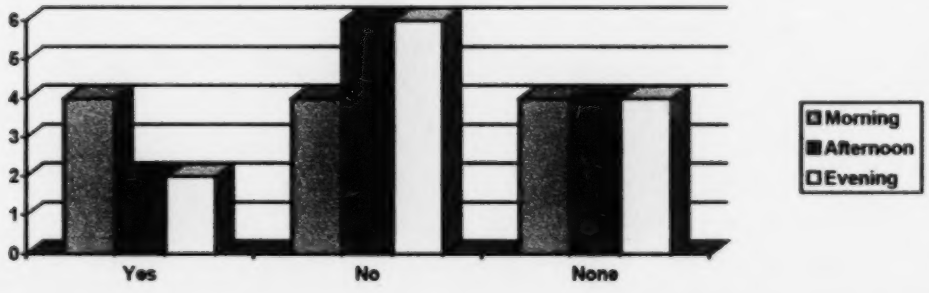
Chaplain Service. Two participants (16%) thought Library Service was solely responsible for both channels.

Have you ever watched any of the programs playing on Channel 6, even in part? This and all remaining questions in the survey deal specifically with the Healthcare CCTV channel. Ten (84%) of the twelve of the participants had ever watched a program themselves.

Do you see any patients viewing Channel 6? Topic? Time of day? (morning, afternoon or evening) Only 67% (N=8) of the nurse managers had ever seen a patient viewing a program on Healthcare CCTV. Participants were allowed to answer yes even if they had only observed one patient viewing a program over the past several years. Topics viewed by patients included stress reduction, addiction recovery, diabetes, high blood pressure and cardiac care. One nurse manager claimed patient viewing of a preoperative program by a patient at the Wade Park division of the medical center. Another of the participants could not remember the topic of the program viewed by a patient.

Morning seems to be the most opportune time in the viewing of patient health education programs on Healthcare CCTV. Of the 8 positive responses, half responded morning, while the remaining half was split equally between afternoon and evening.

Fig. 1. Time of day patients viewed health education programs on CCTV

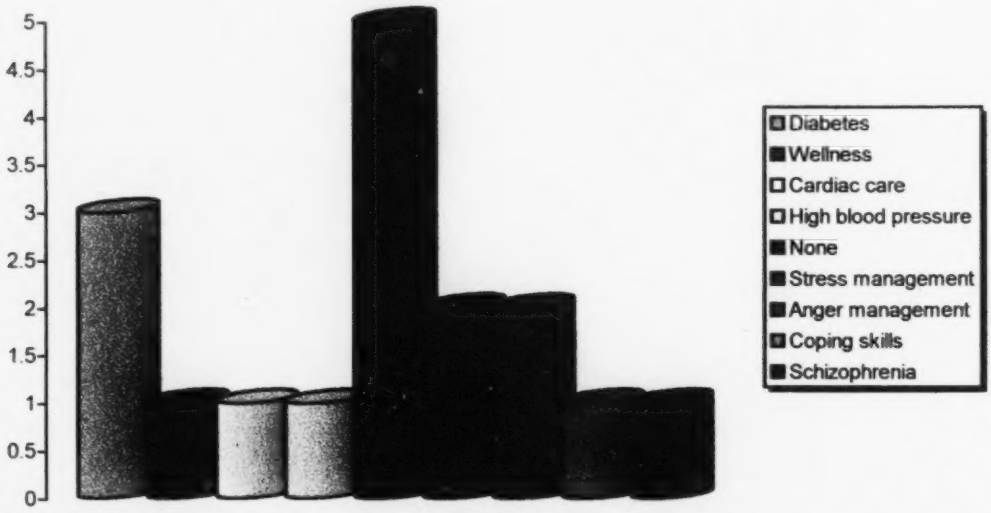


Have you ever recommended a program to a patient? (yes or no) Topic(s)? When asked if any nurse manager had ever recommended a health education CCTV program to a patient,

only 58% (N=7) had done so.

A diverse list of health education topics recommended to patients by nurse managers were given (see Figure 2). Topics specified showed an even split between medical and psychiatric subjects. Medical topics included diabetes, general wellness, cardiac care and hypertension. Psychiatric topics included stress management, anger management, coping skills, and schizophrenia.

Fig. 2. Health education topics recommended to patients by nurse managers



Do you incorporate healthcare CCTV programs into any patient teaching activity? The number of nurse managers who incorporate Healthcare CCTV into any patient teaching activity was only 17% (N=2).

Is this activity documented anywhere? Where? Of the two nurse managers who use CCTV for patient health education, only one uses CCTV and documents this training/education. Documentation is done only during Interdisciplinary Treatment Team meetings. Patient education is not currently documented in the patient's medical record in any form. Although newer versions of the Department of Veterans Affairs nationally implemented Consolidated Patient Record System (CPRS)

will have an option for documenting patient health education in the patient's medical record (Meredith 2001), this feature is not fully implemented in the medical center at this time.

Phase two

Phase two of the survey asks questions to help answer the final four questions posed, namely; what times of day would be best to supplement planned health education activities; what health topics need to be addressed that haven't already been covered; would video on demand be more useful than a static schedule; and would the addition of non-health programming make patients more likely to tune in to the hospital's channels rather than commercial channels?

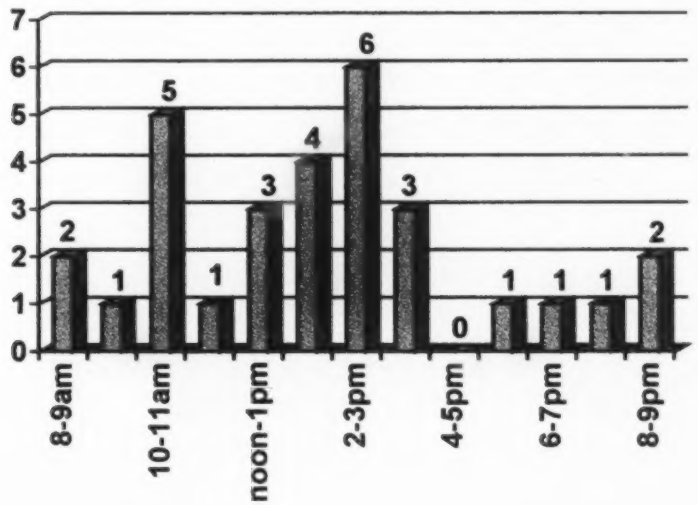
If programs with suitable content were aired at a convenient time, how likely would you be to use Channel 6 programs in your PHE activities? This question used a Likert scale for responses, with one as the least likely and five the most likely. Of the twelve nurse managers responding to this question, eight (67%) chose number four, "Willing to Try" using CCTV in the patient health education activities. Four (33%) responded with number five "Let's Do It" and were ready to commit to a cooperative program.

Are any of your PHE activities scheduled at specific times? Only 42% (N=5) of nurse managers stated that their activities occur on any sort of a time schedule.

What times are most of your PHE activities held? (circle best three) Each nurse manager was asked to circle the best three times for PHE activities on the ward. Times were listed in one hour increments from 8:00 am to 9:00 pm. They were not asked to rate them in order of first, second and third choices for the purposes of this survey. Ten (83%) of the twelve nurse managers responded with three times. The hour from 2:00 pm – 3:00 pm was the time chosen the most, with 10:00 am to 11:00 am selected second most often, and 1:00 pm – 2:00 pm selected third. One ward

stated that they have only one patient health education program daily. Another ward did not select any times, since their ward does only one-on-one training on demand.

Fig. 3. Times given for current PHE activities



Is a copy of your schedule for PHE activities available for me to see? Half of the nurse managers (N=6) had schedules of their PHE activities that would be available for the researcher to review.

What are the topics of your PHE activities? (list as many responses as needed for your PHE activities) Patient health education topics covered on the wards is a varied list, as varied as the diagnosis of the patients on the wards. This list represents some of the more often played topics currently in the rotation of programs used for CCTV. Some topics such as diabetes, hypertension, stress management, general wellness, smoking cessation, coping, depression substance abuse and personal hygiene were mentioned by more than half the twelve wards surveyed. The first table below illustrates the topics listed on the survey form in order from most often selected to least All given topics listed on the survey were chosen by at least two wards.

Table 1. Health education topics in current rotation listed on survey form by greatest number of requests to lowest

# of times selected	Topics listed on survey form
8	Stress management
7	Diabetes
7	Hypertension
7	General wellness
7	Smoking cessation
7	Coping
7	Depression
7	Substance abuse
7	Personal hygiene
6	Anger management
5	Aging
5	General heart health
5	Men's health topics
5	Weight control
5	Post-traumatic stress disorder
5	Alzheimer's disease
4	Women's health topics
4	Food and nutrition
4	Relationships
4	Grief
4	AIDS
4	Schizophrenia
3	Anxiety disorders
2	Personality disorders

Table 2. Topics inserted by nurse managers in addition to those given on the survey

# of times specified	Additional topics as specified by nurse managers
2	Stroke
2	Chronic Obstructive Pulmonary Disease
2	Exercise programs for the elderly
1	Medications
1	Pain management
1	Severe mental disorders
1	Orientation group
1	Rehabilitation after fracture
1	Laryngectomy care
1	Wound healing promotion
1	Patient safety
1	Multiple sclerosis
1	Renal diseases
1	Dialysis (hemo & peritoneal)
1	Cirrhosis
1	Cancer

If CCTV programs on these subjects were aired at the times you do your PHE activities, could they be incorporated into your activities? Of the eleven nurse managers who chose either yes of no, nine nurse managers (82%) agree the CCTV programs could be used in their PHE programs if the right program was played at the right time. Two nurse managers (18%) did not think that CCTV programs could be used in their programs. One nurse manager wrote the word maybe in the margin rather than circling either yes or no.

Are family members ever invited to view CCTV programs? Only one ward invites family members to view patient health education programs on CCTV. This means that over 90% (N=10) of the wards who responded (N=11) do not include family in CCTV activities, or make them aware of the programming available to them. One ward responded with the word "sometimes" written in the margin instead of choosing a yes or no response.

Are you aware that you can request programs and times for upcoming schedules? Of the nurse managers who responded (N=12), 67% (N=8) agreed that they knew it was possible to do

BEST COPY AVAILABLE

this.

What could be done to make these services more visible to patients and employees?

When asked for ideas concerning making these services more visible to patients and employees, several wards (N=8) responded with the following suggestions:

- more rooms with TV's so patients can go to watch educational TV
- coincide more with programming on ward
- information sent to wards
- flyers, emails, listing of programs on character generator
- more communication about programs
- increase TV availability
- flyers on meal trays for special programs
- monthly schedules
- email schedules
- character generator schedule on TV

What would you like to see included in this service that could be of help to you? A variety of responses were given from a few wards (N=5) in response. Among the responses were:

- role play
- patient and family education
- dementia
- send videos around for RN's to preview, then confidence in the video content would be gained
- appropriate times for nurses to review
- sign in sheet, especially for off-tours
- repeat same topic all week to give everyone a chance to view

If the hospital had an "on demand" PHE system for CCTV that would be able to document patient use, would you use such a system? The response was a unanimous (N=12) yes.

Would war history videos played on CCTV, similar to PBS programs, pose any problem that you could foresee for your veteran patients? Nurse managers response to this question was decisive, with 67% choosing yes, and 33% choosing no.

Would programs on topics such as financial skills, employment skills, social skills or

general interest programs be useful for your patients? (N = 11) Of the twelve nurse managers responses, seven (64%) agreed that non-health topics would be useful for patients, while four (36%) did not agree. One nurse manager selected neither yes or no, but wrote in maybe instead.

Do you know what a Character Generator is? (If no, a character generator will be described for you) All twelve nurse managers responded no. The character generator at this medical center has been out of order for the past few years.

If a character generator were in use, would it enable you to better help your patients and staff to view programming? The four nurse managers who contacted the interviewer for a definition of a character generator responded chose yes.

In addition to a schedule of programs, what other information would you like to see displayed on the screen? Three nurse managers offered the following suggestions:

- hospital services that are available and where to find them: ie: clothing store hours, recreation hall activities and special programs/events
- notices of upcoming programs
- history about the facility
- take a walking tour of the facility so residence [residents] would know where to find things, etc. Dental, KT, OT, swimming pool, recreation hall, library

CHAPTER 5

SUMMARY AND RECOMMENDATIONS

Phase one of the survey shows that closed circuit television is underutilized. Phase two points out inadequacies of the system, and can be used as a guide to system improvement. CCTV at the Brecksville Department of Veterans Affairs Medical Center is not, in its present state, the useful tool that a busy healthcare professional needs to help provide health education to patients.

Based on the many good suggestions tendered by nurse managers during the course of the survey, several recommendations can be made that can be implemented to make CCTV a useful system. . Each of these will be discussed in more detail on the following pages.

Long-term improvements include:

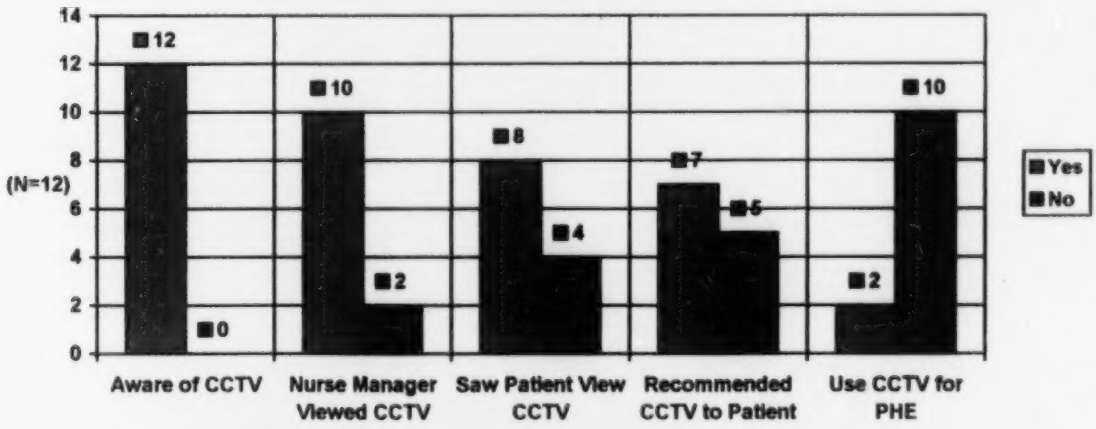
1. Replacing the broken character generator;
2. Making more areas of each ward CCTV accessible to patients;
3. Upgrading to a digital video on demand system that could be interfaced with the new Computerized Patient Record System (CPRS).

Short term improvements include:

1. Scheduling program blocks by topic rather than by program title;
2. Keeping the same topic blocks throughout the month rather than one week;
3. Distributing schedules via email, as well as sending paper copies.

Nursing staff is aware of the system, schedules are sent out weekly, and in most cases, schedules is posted in a visible location. Programs playing on CCTV cover most of the health education topics that nurse managers have identified as important. Yet the system receives very little use. The blue columns in the following chart show a sharp decline from the number of nurse managers who know about CCTV (N=12) to the number who use CCTV for patient health education (N=2).

Fig. 4. CCTV Awareness vs. Use



Six wards have patient health education activity schedules that are available for the interviewer to view. This is a surprising number, since only five of the wards claimed to have PHE activities scheduled at specific times.

Several nurse managers contacted the interviewer to obtain the definition of a character generator. These nurse managers in turn responded to the questions regarding character generator use, and offered some very good suggestions. Among these were ideas to showcase specific events and services such as: departments in the hospital that patients are likely to interact with; program descriptions and schedules; and announcements of special events. All these would make CCTV channels valuable even during times that health education programs are not being played. Purchase of a new character generator is therefor recommended.

Nurse managers mentioned the lack of private areas to view health education programming. Most wards have only a single television connected to CCTV. That one television is located in the dayroom, which is a large public room where most ward social activities are held. In such an environment, there is no privacy, and the constant distractions make concentration difficult, if not impossible. Wiring at least one additional room on each ward is recommended to

increase access to CCTV by patients, to allow patients and family greater privacy, and to enhance concentration while watching educational programming.

There should be a much closer, more integrated involvement between the nursing staff and the technician who schedules the times and programs for CCTV. Patient health education programming will not be used on the ward if for instance, diabetes classes are held at 10:00 in the morning and the programs play at 2:00 in the afternoon. Contacting each ward is recommended to obtain specific times and topics of routine health education on each ward. Communication should remain open and ongoing to keep abreast of changes and monitor satisfaction.

Until each ward is contacted for specific times and topics, a core set of programs can be played at the high demand times indicated in phase two of the survey. In an effort to make the CCTV schedule more user friendly, monthly schedules can be provided instead of the current weekly schedules. Rather than listing specific program titles for each one hour time block, health topics can be listed. A second section of this new schedule could include the program titles being played in each topic, along with the run time and a short program description. Program descriptions would be an improvement over listing only program titles, especially in view of the catchy but not very descriptive titles of some programs, such as "Understanding" (about Rational Emotive Therapy), "Harbor of Hope" (about coping with chronic illness), "Death in the West" (about the horrors of tobacco use), "Chasing the Dragon" (about heroin use) and "Are You Tough Enough?" (about father-son relationships). To make schedules more easily accessible and delivery faster, schedules could be emailed to nurse managers using the hospital internal email system. Paper copies could still be mailed though in-house mail delivery.

A factor not mentioned during the survey, but impacting closed circuit television, is the advent of digital television (DTV). Commercial television broadcasts, as we knew them for years,

were analog broadcasts, and were received by the analog receivers in our analog televisions. In 1999, some commercial stations began to broadcast digitally, requiring a digital receiver in a digital television. By May of 2002, all stations will be broadcasting both the older analog and the newer digital signals. In 2006, commercial television stations will cease analog broadcasting, and broadcast only digital (Federal Communications Commission 1998).

What impact does digital television have for CCTV use at the medical center? By the year 2006, either all receivers, televisions, and possibly cabling must be replaced with digital equipment, or the medical center must purchase converters. These converters will receive the digital broadcast signals from the commercial stations, and send the signal back out in analog to the analog televisions. Unfortunately, analog televisions are not able to display the enhanced features of digital. Purchasing converters is more cost effective initially, but as televisions are replaced, they will be replaced with the commonly available digital sets. At some point, the medical center must decide to move to a completely digital system. When this occurs, the medical center will have increased sound and picture quality, and many more channels available for use.

All twelve nurse managers responded that a video on demand system would greatly enhance CCTV, making it a completely individualized tool for patient health education activities. Video on demand does not use videocassettes played in videocassette players. Video programs are digitized and saved to a computer drive. They are not scheduled at static times, but they are instead requested by phone. Anyone in a room with a phone and a TV connected to CCTV can request a program. By pushing buttons on the phone, a patient, family member or employee can specify which program they want to see. Programs begin within a few moments after the request is made on one of the channels available to the system. Some systems automatically compile and print reports detailing which patients viewed which programs on which days. Some can even

deliver an onscreen post-test which the patient answers by pushing buttons on the phone. This helps the medical center comply with the Joint Commission's standards for patient health education, since patient learning must also be assessed afterwards, and well as providing the initial teaching. One company, Instant Healthline, has been working with the Department of Veterans Affairs Medical Center located in Albany, New York to integrate this report directly into CPRS, the computerized patient record system (U.S. Department of Veterans Affairs 2001).

Further studies reiterating targeted key questions concerning usage, health topics, and timeframes should be done on a routine basis to help gauge the effectiveness of any changes made to the system, its programming and scheduling, and its continued use. It is recommended that allowing the nurse managers time to collaborate with staff yields more intuitive responses, but it is necessary to go over the answers with the nurse manager at the time the survey is returned, so that questions can be answered, and answers can be clarified.

Further contact with Instant Healthline or a suitable competitor should be initiated to determine the extent of the changes needed to make this medical center capable of broadcasting video on demand. It may be possible to tie some modifications into the change-over to digital television.

Whether or not video on demand is implemented, contact should be made with nurse managers to elicit the titles of programs that are more useful. This would also expose them to new programs they may not have seen, and weed out those that are not suitable for their use.

In summary, based on the low use of CCTV by nursing staff for patient health education and the new technologies available in digital television and video on demand CCTV, recommendations were made to obtain a new character generator, wire additional areas of the each ward for patient use of CCTV, upgrade to a digital video on demand system, and increase the communication between the technician who schedules CCTV programming and the nurses who implement health education.

APPENDIX A
Phase One Questionnaire

1. Are you aware of the hospital's Closed Circuit Television (CCTV) system? (yes or no)
(If yes, go to #2, if no, survey is complete)

2. Do you receive the weekly schedule mailed to each ward? (yes or no)

2a. Is it posted anywhere? (yes or no)

2b. Is it visible to patients? (yes or no)

3. How many CCTV channels does the hospital have? (answer with a number)

4a. Do you know which departments run the system/do the programming? (yes or no)

4b. Who?

5. Have you ever watched any of the programs playing on Channel 6, even in part? (yes or no)

6a. Do you see any patients viewing Channel 6? (yes or no)

6b. Topic?

6c. Time of day? (circle all that apply)

morning afternoon evening

7a. Have you ever recommended a program to a patient? (yes or no)

7b. Topic(s)? (list all responses)

8. Do you incorporate healthcare CCTV programs into any patient teaching activity? (yes or no)

9a. Is this activity documented anywhere? (yes or no)

9b. Where?

Phase Two Questionnaire

1. If programs with suitable content were aired at a convenient time, how likely would you be to use Channel 6 programs in your PHE activities? (circle the best response)

1	2	3	4	5
Never	Probably would not	I'll think about it	Willing to try	Let's do it

2a. Are any of your PHE activities scheduled at specific times? (yes or no)
(If no, skip to question 4)

2b. What times are most of your PHE activities held? (circle best three)

AM: 8-9 9-10 10-11 11-noon

PM: noon-1 1-2 2-3 3-4 4-5 5-6 6-7 7-8 8-9

3. Is a copy of your schedule for PHE activities available for me to see?
(yes or no)

4. What are the topics of your PHE activities?
(list as many responses as needed for your phe activities)

___ Diabetes
___ Hypertension
___ Stress management
___ Aging
___ General heart health
___ General wellness
___ Men's health topics
___ Women's health topics
___ Food and nutrition
___ Smoking cessation
___ Personality disorders
___ Anxiety disorders
___ Relationships
___ Coping
___ Grief
___ Weight control
___ AIDS
___ Schizophrenia
___ Depression
___ Anger management
___ Post-traumatic stress disorder
___ Substance abuse
___ Alzheimer's disease
___ Personal hygiene
___ Other (specify all)

_____
_____
_____
_____
_____
_____

5. If CCTV programs on these subjects were aired at the times you do your PHE activities, could they be incorporated into your activities? (yes or no)

6. Are family members ever invited to view CCTV programs? (yes or no)

7. Are you aware that you can request programs and times for upcoming schedules?
(yes or no)

8. What could be done to make these services more visible to patients and employees?
(list all responses)

9. What would you like to see included in this service that could be of help to you?
(list all responses)

10. If the hospital had an "on demand" PHE system for CCTV that would be able to document patient use, would you use such a system? (yes or no)

11. Would war history videos played on CCTV, similar to PBS programs, pose any problem that you could foresee for your veteran patients? (yes or no)

12. Would programs on topics such as financial skills, employment skills, social skills or general interest programs be useful for your patients? (yes or no)

13a. Do you know what a Character Generator is? (yes or no)
(If no, a character generator will be described for you)

13b. If a character generator were in use, would it enable you to better help your patients and staff to view programming? (yes or no)

13c. In addition to a schedule of programs, what other information would you like to see displayed on the screen?

APPENDIX B

Department of Veterans Affairs

Memorandum

Date: April 23, 1999

From: Chief, Library Service 142D(B)

Subj: Proposal of CCTV Usage

To: Eloisa Tamez, Ph.D., FAAN 118(B)
David Aron, M.D. 14(W)
Peter Goyer, M.D. 11(B)

I am asking each of you to review this proposal for your concurrence. The results of this survey will be presented at the Patient Health Education Committee at both the local and VISN level and it will provide guidance and support in determining future programming of CCTV for Patient Health Education purposes. If you have any concerns or questions, please feel free to reach me at extension 6242.

JANET MONK GILLETTE

Attachment

APPROVED/DISAPPROVED

ELOISA TAMEZ, Ph.D.

APPROVED/DISAPPROVED

DAVID ARON, M.D.

APPROVED/DISAPPROVED

PETER GOYER, M.D.

BEST COPY AVAILABLE

VA FORM MAR 1986 2105

Consent Form:

An Evaluation of Current CCTV Usage in Support of PHE Activities at the Louis Stokes Cleveland Department of Veterans Affairs Medical Center Brecksville Unit

I want to do research on the use of CCTV at this medical center for patient health education activities. I want to do this because I would like to use CCTV to help support your program needs. I would like you to take part in this project. If you decide to do this, you will be asked to participate in a two stage oral survey of CCTV usage in your area. Each stage would take approximately ½ hour to complete. There will be a several week period between the two stages.

If you take part in this project, I hope to be better able to support the patient health education activities for the patients in your area. Taking part in this project is entirely up to you, and no one will hold it against you if you decide not to do it. If you do take part, you may stop at any time.

If you want to know more about this research project, please call me at x6250. The project has been approved by both Kent State University and Dr. Peter Goyer at this VAMC. If you have any questions about Kent State University's rules for research, please call Dr. M. Thomas Jones at (330) 672-2851.

You will get a copy of this consent form.

Sincerely,

Diane Kromke
Patient Library Technician

B. CONSENT STATEMENT(S)

1. I agree to take part in this project. I know what I will have to do and that I can stop at any time.

_____ _____

Signature Date

APPENDIX C

HEALTHCARE CCTV

Brecksville Channel 6

July 23rd through July 29th, 2001

Monday	Tuesday	Wednesday	Thursday	Friday	Weekend
8:00 am Values & Personal Responsibilities 9:00 am I am Joe's Liver Hepatitis A 10:00 am Psychotherapies 11:00 am Eating Healthy for Life Nutrition for the Over-50 Gang Eating Healthy for the Best Years Noon Kissing Guilt and Shame Goodbye 1:00 pm Psychotherapies 2:00 pm I am Joe's Liver Hepatitis A 3:00 pm Humor Your Stress 4:00 pm Kissing Guilt and Shame Goodbye 7:00 pm I am Joe's Liver Hepatitis A 8:00 pm Kissing Guilt and Shame Goodbye 9:00 pm Writing Resumes and Cover Letters Web Resumes & Other Non-traditional Formats 10:00 pm Humor Your Stress	8:00 am Kissing Guilt and Shame Goodbye 9:00 am Writing Resumes and Cover Letters Web Resumes & Other Non-traditional Formats 10:00 am Humor Your Stress 11:00 am Smart Supermarket Shopping Eating Healthy on a Budget Food Guide Pyramid Noon Kissing Guilt and Shame Goodbye 1:00 pm I am Joe's Liver Hepatitis A 2:00 pm Humor Your Stress 3:00 pm Psychotherapies 4:00 pm Kissing Guilt and Shame Goodbye 7:00 pm I am Joe's Liver Hepatitis A 8:00 pm Kissing Guilt and Shame Goodbye 9:00 pm Writing Resumes and Cover Letters Web Resumes & Other Non-traditional Formats 10:00 pm Humor Your Stress	8:00 am Kissing Guilt and Shame Goodbye 9:00 am I am Joe's Liver Hepatitis A 10:00 am Psychotherapies 11:00 am Vive la Difference: Women & Nutrition Eating Healthy for Weight Control Break Your Behavior Chains Noon Kissing Guilt and Shame Goodbye 1:00 pm Psychotherapies 2:00 pm I am Joe's Liver Hepatitis A 3:00 pm Humor Your Stress 4:00 pm Kissing Guilt and Shame Goodbye 7:00 pm I am Joe's Liver Hepatitis A 8:00 pm Kissing Guilt and Shame Goodbye 9:00 pm Writing Resumes and Cover Letters Web Resumes & Other Non-traditional Formats 10:00 pm Humor Your Stress	8:00 am Kissing Guilt and Shame Goodbye 9:00 am Writing Resumes and Cover Letters Web Resumes & Other Non-traditional Formats 10:00 am Humor Your Stress 11:00 am Taste of Eating Healthy Vegetarianism Introduction to Good Nutrition Noon Kissing Guilt and Shame Goodbye 1:00 pm I am Joe's Liver Hepatitis A 2:00 pm Humor Your Stress 3:00 pm Psychotherapies 4:00 pm Kissing Guilt and Shame Goodbye 7:00 pm I am Joe's Liver Hepatitis A 8:00 pm Kissing Guilt and Shame Goodbye 9:00 pm Writing Resumes and Cover Letters Web Resumes & Other Non-traditional Formats 10:00 pm Humor Your Stress	8:00 am Kissing Guilt and Shame Goodbye 9:00 am I am Joe's Liver Hepatitis A 10:00 am Psychotherapies 11:00 am Eating for a Healthy Heart Eating Healthy for Heart Health Noon Kissing Guilt and Shame Goodbye 1:00 pm Psychotherapies 2:00 pm I am Joe's Liver Hepatitis A 3:00 pm Humor Your Stress 4:00 pm Kissing Guilt and Shame Goodbye 7:00 pm I am Joe's Liver Hepatitis A 8:00 pm Kissing Guilt and Shame Goodbye 9:00 pm Writing Resumes and Cover Letters Web Resumes & Other Non-traditional Formats 10:00 pm Humor Your Stress	8:00 am Kissing Guilt and Shame Goodbye 9:00 am Writing Resumes and Cover Letters Web Resumes & Other Non-traditional Formats 10:00 am Humor Your Stress 11:00 am I am Joe's Liver Hepatitis A Noon Kissing Guilt and Shame Goodbye 1:00 pm I am Joe's Liver Hepatitis A 2:00 pm Humor Your Stress 3:00 pm Writing Resumes and Cover Letters Web Resumes & Other Non-traditional Formats 4:00 pm Kissing Guilt and Shame Goodbye 7:00 pm I am Joe's Liver Hepatitis A 8:00 pm Kissing Guilt and Shame Goodbye 9:00 pm Writing Resumes and Cover Letters Web Resumes & Other Non-traditional Formats 10:00 pm Humor Your Stress

For more information, contact Diane Kromke, Library Service, x6250

REFERENCE LIST

Agre, P., M. Bookbinder, C. Cirrincione, and E. Keating. 1990. How much time do nurses spend teaching cancer patients. *Patient Education and Counseling* 16:29-38.

American Hospital Association, "AHA Management Advisory: A Patient's Bill of Rights," (1992), at http://www.aha.org/resource/pbillofrights.asp.

American Hospital Association. Center for Health Promotion. AHA/CDC Health Education Project. 1982. *Closed circuit television and patient education: A Resource manual. n.p.*

Cipparrone, N., D. Fields, D. Stiger, E. Carlson-Djupe and L. Joesten. 1997. Awareness and perceptions of a hospital's closed-circuit TV channels. *Journal of Biocommunication* 24:3-6.

Dooley, R. 1992. *'Removing the barriers'-Health education and media systems enhancements at Bellevue Hospital Center.* New York: Program in Health Studies. Database online. Available from Electronic Library.

Esdale, A., and H. Harris. 1985. Evaluation of a closed circuit television patient education program: Structure, process and outcome. *Patient Education and Counseling* 7:193-215.

Federal Communications Commission. Office of Engineering and Technology. "Digital Television Consumer Identification," (1998), at http://www.fcc.gov/Bureaus/Engineering_Technology/Factsheets/dtv9811.html.

Gilroth, B., ed. 1993. *Managing Hospital-Based Patient Education.* Chicago, IL: American Hospital Association.

Guttentag, D. N. Pediatric television: the state of the art. *Child Health Care* 15:82-90.

Guttentag, D. N., W. L. Albritton, and R. B. Kettner. Daytime television viewing by hospitalized children: the effect of alternative programming. *Pediatrics* 71:620-625.

Harris, C. 1986. Programming for special groups through closed-circuit television. *Child Health Care* 15:91-94.

Lernihan, J. 1974. Closed circuit television for in-hospital patient health education. M.S. diss., State University of New York.

Mancini, L. J. 1984. Shared services for closed-circuit television. *Patient Education Newsletter* 7:4-5.

Meredith, Erin. 2001. *Patient Education Documentation Using CPRS.* (PowerPoint presentation received via email to VHA Patient Education Contacts group)

Nussen, J. 1990. An Evaluative survey to determine utilization and effectiveness of closed circuit television (CCTV) at Kaiser Permanente, Bellflower. M.S. diss., California State University.

Regen, D. 1983. Health information channels: A Field survey of hospital CCTV practices and patient use. M.A. diss., Indiana University.

U.S. Department of Veterans Affairs. Office of Academic Affairs. 1987. *Patient Health Education Profile in VA Medical Centers (March 1987)*. Washington, D.C.

U.S. Department of Veterans Affairs. Office of Academic Affairs. 1991. *Patient Health Education: Our Customers' Views: Phase II Report: Patient Health Education Evaluation Project. n.p.*

U.S. Department of Veterans Affairs. VA Healthcare System of Ohio. 1998. *"Tally of Patient Education Profile Responses". n.p.*

U.S. Department of Veterans Affairs. Virtual Learning Center. "Innovation Award: On-Demand Technology - VISN 2's Journey Toward an Integrated System of Patient Education, Staff Development and Service Recovery" (2001), at http://vaww.va.gov.med.osp/cgi-bin/browse.asp

Worobey, J. L. 1985. "Using closed-circuit television as a teaching tool: Implications for health communication educators," Paper presented at the annual meeting of the Eastern Communication Association, Providence, RI, 2-5 May. EDRS, ERIC, CS 504982.